

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Final Office Action dated October 31, 2007. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-27 are currently pending in the Application. Claims 1, 8, 23 and 26 are independent claims.

In the Office Action, claims 1-5 and 23-25 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,947,905 to Hadjicostis ("Hadjicostis"). Claims 6-22 and 26-27 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Hadjicostis in view of U.S. Patent No. 7,022,080 ("Marian"). It is respectfully submitted that claims 1-27 are allowable over Hadjicostis alone and in view of Marian for at least the following reasons.

It seems undisputed that Hadjicostis shows a flexible coaxial cable extension wherein an ultrasound array 30 is positioned on a distal end of the flexible coaxial cable extension (see, FIG. 1 and accompanying description col. 4, lines 53-56). Hadjicostis also shows an integrated circuit 40 that is also positioned along the flexible coaxial cable extension proximate to the ultrasound array.

FIGS. 4 through 8 show different cross sections of the flexible coaxial cable extension including round cross sections and cross sections with bent and straight portions. However, each section shown has the ultrasound array following distal to the integrated circuit along the flexible coaxial cable extension (with reference to a connection end of the flexible coaxial cable extension that is not shown in the figures).

In a Response to Arguments section of the Final Office Action, it is stated that "Hadjicostis discloses connection means (4a) and acoustic elements (7a) being disclosed on the same surface of the integrated circuit (3a)."

This position is respectfully refuted. While for example FIG. 3A shows the acoustic stack 30a and the coaxial interconnection indicated at cross-sectional lines 4A-4A, positioned above (with reference to the orientation of FIG. 3A) the integrated circuit 40a, it is submitted that as made clear by each of the figures of Hadjicostis, the acoustic stack is not positioned on a surface of the integrated circuit. While from viewed along one of the cross sectional figures depicted in FIGS. 4A-8B of Hadjicostis, the acoustic stack may appear above or below some portion of the

integrated circuit, the acoustic stack is not positioned on a surface of the integrated circuit!

Accordingly, it is respectfully submitted that the ultrasonic transducer of Claim 1 is not anticipated or made obvious by the teachings of Hadjicostis. For example, Hadjicostis does not disclose or suggest, an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis provided) "a housing; acoustic elements arranged in said housing; an integrated circuit arranged in said housing adjacent said acoustic elements; first connection means for connecting said acoustic elements to said integrated circuit; and second connection means for connecting said integrated circuit to electrical transmission lines, connection sites for said first and second connection means and said acoustic elements being arranged on a common surface of said integrated circuit" as recited in Claim 1.

It is also respectfully submitted that Hadjicostis in view of Marian does not disclose or suggest, an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "said acoustic assembly, said electronic components and the signal transmission lines being connected in a circuit defined in part by said flexible circuit with one of said electrical

components being an integrated circuit, said acoustic assembly being positioned on a surface of the integrated circuit" as recited in claim 8. It is submitted that Hadjicostis and Marian does not show the acoustic assembly positioned on a surface an the integrated circuit as recited in claim 8.

It is further respectfully submitted that Hadjicostis in view of Marian does not disclose or suggest, an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "said connection sites of said integrated circuit are positioned on and above a same side of said integrated circuit as said acoustic assembly which is also positioned on said integrated circuit, said electronic components being positioned below the same side of said integrated circuit" as recited in Claim 23. While Marian does show a flexible circuit that extends in a first direction and a second direction that extends perpendicular to the first direction, the acoustic assembly (transducer elements 25) is positioned to a left side of other components, such as printed circuit board 110. Certainly the transducer elements 25 are not positioned on the printed circuit board 110 as made clear from, for example, FIG. 2.

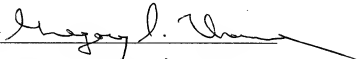
Further, it is respectfully submitted that Hadjicostis does not disclose or suggest, a method for manufacturing an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "arranging an acoustic assembly on a flexible circuit that extends along a first axis; ... and bending the flexible circuit at least partially around a thermally-conductive body to form at least one 180° bend about the body with the acoustic assembly being spaced from the electronic components along a second axis that extends substantially perpendicular to the first axis and both the acoustic assembly and the electronic components are positioned, with respect to each other, along the second axis" as recited in Claim 26.

Based on the foregoing, the Applicants respectfully submit that independent Claims 1, 8, 23 and 26 are patentable over Hadjicostis alone and in view of Marian and notice to this effect is earnestly solicited. Claims 2-7, 9-22, 24-25 and 27 respectively depend from one of Claims 1, 8, 23 and 26 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By 

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